## METHODS AND COMPOSITIONS FOR USE IN SYNTHESIZING LABELED NUCLEIC ACIDS

## ABSTRACT OF THE DISCLOSURE

The present invention provides methods and compositions for producing a plurality of labeled deoxyribonucleotides from an initial nucleic acid sample. In the subject methods, a solid support bound polyA+ RNA fraction is first produced from the initial nucleic acid sample. The resultant solid support bound fraction is then contacted with a plurality of gene specific primers, followed by annealed gene specific primer primed synthesis of a plurality of labeled deoxyribonucleotides. Also provided are kits for use in practicing the subject methods.